

distance. Nine times out of ten what is meant by these words is Ladak—a truly Tibetan province in its physical features, but politically part of Kashmir.

If, as we may hope, future travellers are able to penetrate or send native collectors into other parts of Tibet, such as the Chumbi valley, bordering on Sikkim, or the frontier districts adjoining Upper Assam, the locality from whence specimens are brought should always be specified, and the bare term Himalayas or, still worse, Northern India (which may mean any thing from Calcutta to Suddya or Kashgar) abolished.

As regards the next species described by Mr. Butler, *Papilio nebulosus*, I cannot agree with him, believing it to be merely an aberration of *P. antiphates*, as, indeed, he suggests it may be.

I procured at Darjiling two specimens of this aberration, neither of which agrees exactly with the other or with Mr. Butler's specimen in its markings, though they have both the same character. The gentleman in whose collection they were, and who, I believe, got them in the same season as Dr. Lidderdale's specimen, agreed with Mr. Godman and myself in this determination; and though it certainly appears to mimic *P. euphrates*, I think there is every reason to believe it is not a good species. If, however, it is necessary to breed it from the egg of *P. antiphates* in order to prove this, I am afraid many years will elapse before the matter is cleared up.

L.—*Description of a new Species of Mole from China.*

By OLDFIELD THOMAS, F.Z.S., British Museum.

THE specimen here described was obtained near Peking by the late Mr. Robert Swinhoe during the British expedition to that place in 1860. Shortly after its arrival in England it was mentioned by Dr. Gray* as a new species, but was not named or described. Later it was referred to by Mr. Swinhoe† under the belief that it was identical with a mole obtained by Père David in Mongolia, and described by Prof. A. Milne-Edwards in his 'Recherches pour servir à l'Histoire naturelle des Mammifères' as *Scaptochirus moschatus*‡. I propose to call the new species, on account of the comparative slenderness of its tail,

* P. Z. S. 1861, p. 390.

† P. Z. S. 1870, pp. 450 and 620. (In the latter place Mr. Swinhoe quotes the name as *Scaptochirus Davidianus*, a term which has never been used by Prof. Milne-Edwards.)

‡ Texte, p. 173, Atl. pl. 17 a.

Talpa leptura.

Fur, as usual, soft and velvety, with slate-coloured bases and shining coppery tips. Eyes apparently covered by the integument. Tail short and slender, barely half as long as the skull, thinly clothed with white hairs. Muzzle broad; teeth large and powerful. Dental formula as in *T. leucura*, Blyth*, viz. I. $\frac{3}{3}$, C. $\frac{1}{1}$, P.M. $\frac{3}{4}$, M. $\frac{3}{3}$ †. Third upper premolar very strong and trenchant, twice as large as in *T. leucura*. In the lower jaw the second and third premolars are equal in size, very small, pressed closely together, and placed with their long axes at right angles to the direction of the jaw, thus differing from *T. leucura*, in which they are placed nearly longitudinally; the fourth is well developed, about three times the size of the two preceding it. Molars with numerous well-developed sharp-pointed cusps.

Dimensions.

	inches.
Head and body (about)	5.0
Tail	0.6
Fore foot, length, with claws	0.85
" breadth	0.6
Hind foot, length	0.8
Skull, length	1.35
" greatest breadth	0.7
Palate, length	0.57
" breadth, including molars	0.43
Length of lower jaw	0.89

With regard to the affinities of this species, it would seem to be somewhat intermediate between *Scaptochirus moschatus* and *Talpa leucura*, possessing the same dental formula as the latter, while the shape both of the muzzle and of the teeth in section is exactly as in the former. The structure of the teeth of *Scaptochirus* would, however, appear to be somewhat different from what is found in *Talpa leptura*, as Prof. Milne-Edwards has kindly informed me that the peculiar flat character of the molars, described in the 'Recherches' from a single specimen, has been also found in two others

* J. A. S. B. xix. p. 215, pl. iv. fig. 1 (1850).

† By an unfortunate misprint in the dental formula, the premolars of *Scaptochirus moschatus* were described as being $\frac{2}{2}$ or $\frac{3}{3}$, according to the manner of determining the lower canine; but, as is clearly shown by the figure and description, these numbers, if the molars be counted as $\frac{4}{4}$, as is done by Prof. Milne-Edwards, ought to be $\frac{2}{2}$ or $\frac{3}{3}$ respectively. As, however, there appears to be no doubt that the formula for *Talpa*, with regard both to the incisors and molars, given by Prof. Owen (Odontography, i. p. 416, 1840) is correct, the true number of premolars possessed by *Scaptochirus* will be $\frac{3}{3}$.

which have since been received by the Paris Museum; so that this character is thus shown to be a constant one. It seems probable, however, that it will in the end be found unnecessary to retain *Scaptochirus* as a genus distinct from *Talpa*, since *T. leptura* has so exactly the same broad muzzle and stout powerful teeth, and the difference in the dental formula only consists of the absence of one of the two minute teeth following the canine-like first lower premolar.

The following are the four different dental formulæ found among the moles:—

Inc. $\frac{3}{3}$, C. $\frac{1}{1}$, P.M. $\frac{4}{4}$, M. $\frac{3}{3}$, $\times 2 = 44$. (*T. europæa*, *cæca*,
*mizura**, &c.)

Inc. $\frac{3}{2}\dagger$, C. $\frac{1}{1}$, P.M. $\frac{4}{4}$, M. $\frac{3}{3}$, $\times 2 = 42$. (*T. wogura* and
insularis.)

Inc. $\frac{3}{3}$, C. $\frac{1}{1}$, P.M. $\frac{3}{4}$, M. $\frac{3}{3}$, $\times 2 = 42$. (*T. leucura* and
leptura.)

Inc. $\frac{3}{3}$, C. $\frac{1}{1}$, P.M. $\frac{3}{3}$, M. $\frac{3}{3}$, $\times 2 = 40$. (*S. moschatus*.)

LI.—Remarks on a Pathogenic Schizophyte †.

By Prof. H. J. DETMERS.

WHEN about two and a half years ago it became my duty to investigate the prevailing Swine-plague, the so-called Hog-cholera, I first endeavoured to ascertain the nature and the cause of that disease, and to accomplish my object made numerous post-mortem examinations, and paid special attention to the microscopic examinations of the blood and of the morbid products and morbid tissues. Although the microscope at my disposal at the beginning of my investigation was only a small No. viii. Hartnack stand with three Hartnack and Prazmowski objectives (a 1-inch, a $\frac{1}{4}$ -inch, and a $\frac{1}{8}$ -inch imm. and correctives), and consequently not a strictly first-class instrument, and in its performance by no means equal to the work of a Tolles or a Zeiss, I soon became convinced that the blood, the morbid products, and the morbid tissues of

* Günth. P.Z. S. 1880, p. 441.

† Prof. Owen (Odont. i. p. 416, footnote) says, "In the *T. moogura*, Temm. (lege *wogura*), the inferior canine is absent." From the examination of several specimens of the Japanese mole it appears to me to be rather the third incisor which is absent, there being no space whatever, when the jaw is closed, between the hinder edge of the third lower tooth and the anterior edge of the upper canine; and, moreover, it is not set in the same line as the first two teeth, as the third incisor is in the other moles, but is placed somewhat internal to them, just as the canine is in the common species.

‡ From 'Science,' May 7, 1881. Read before the State Microscopical Society of Illinois, April 8th, 1881.